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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,210	08/17/2001	Anthony K. Maczura	TXY-008.01	5582

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FOLEY HOAG, LLP
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EXAMINER

EVANS, FANNIE L

ART UNIT PAPER NUMBER

2877

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/932,210	Applicant(s) MACZURA ET AL.	
	Examiner F. L. Evans	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-13 and 16-41 is/are rejected.
- 7) ☒ Claim(s) 3, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on August 17, 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2-5</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

The Information Disclosure Statements

The prior art cited in the information disclosure statements filed on January 25 and 28, 2002, February 25, 2002, May 15, 2002 and July 10, 2002 has been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The lack of an antecedent for “the sample window” in line 3 of claim 6 renders the claim indefinite. Correction is required.

Claim 27 is indefinite in that it fails to set forth how the housing is configured for positioning in a sample containment apparatus.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 7, 8-13, 16-19, 24 and 28-33 are rejected under 35 U.S.C. § 102(a) as being clearly anticipated by Hirako (JP 11-83627), cited by applicant.

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Hirako discloses a method of and apparatus for analyzing a sample based on spectroscopy having every step/element claimed by applicant. In Fig. 6, Hirako shows a light source (22) disposed in a first chamber (29/35) to irradiate a sample (3) with a large illumination spot; an optical pick-up (wavelength separator 38/25 and detector 39/26) disposed in a second chamber; an optical blocking element (28); and a movable reference shutter (36). The light source (22) irradiates light onto the sample (3) through a first window (the opening in the lower portion of chamber 29/35) and the wavelength separator (38/25) receives light through a second window (entrance slit of the spectrometer). A diffuser (24) is provided to evenly distribute intensities of light irradiated from the sample. A data processor (27) determines the composition of the sample 3. See Hirako in its entirety.

Claims 11-13, 17, 19, 25 and 26 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Weston (US 4,968,143), cited by applicant.

Weston discloses a method of and apparatus for analyzing a sample based on spectroscopy having every step/element claimed by applicant. Weston discloses a light source (25) disposed in a first chamber (26) to irradiate a sample with a large illumination spot via aperture (11); a wavelength separator (33); a detector (36) with a wide viewing angle; and a processor/computer (28) coupled to the detector. The wavelength separator and the detector are disposed in a second chamber (34). The light source irradiates light onto the sample through a first window (aperture 11) and the wavelength separator receives light through a second window (output end of collimator 32). An analog to digital converter (45) is coupled between the detector and the processor/computer. See Weston in its entirety.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 20-23 and 34-41 are rejected under 35 U.S.C. § 103(a) as being unpatentable Weston (US 4,968,143).

Weston discloses a method of and apparatus for analyzing a sample based on spectroscopy having every step/element claimed by applicant. Weston discloses a light source (25) disposed in a first chamber (26) to irradiate a sample with a large illumination spot via aperture (11); a wavelength separator (33); a detector (36) with a wide viewing angle; and a processor/computer (28) coupled to the detector. The wavelength separator and the detector are disposed in a second chamber (34). The light source irradiates light onto the sample through a first window (aperture 11) and the wavelength separator receives light through a second window (output end of collimator 32). An analog to digital converter (45) is coupled between the

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detector and the processor/computer. Weston does not disclose the dimension of the spot size illuminated by the light source and the dimension of the viewing aperture of the detector. See Weston in its entirety.

At the time the invention was made, it would have been obvious to one at ordinary skill in the art that the dimension of the spot size illuminated by the light source and the dimension of the viewing aperture of the detector, as shown in the drawings of Weston, would have been greater than 0.5 square inches.

Allowable Subject Matter

Claims 3, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 42 is allowed over the prior art of record.

As to claim 3, the prior art of record, taken alone or in combination, fails to disclose or render obvious a probe head comprising a blocking element biased in contact with the sample window, in combination with the rest of the limitations of the claim.

As to claim 14, the prior art of record, taken alone or in combination, fails to disclose or render obvious a probe head comprising a hermetically sealed detector in the second chamber, in combination with the rest of the limitations of the claim.

As to claim 42, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method of spectroscopically analyzing a material flowing within a sample containment apparatus using a probe head of a spectrometer having a light source positioned in a

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first chamber of the probe head and detector positioned in a second chamber of the probe head, in combination with the rest of the limitations of the claim.

Fax/Telephone Numbers

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The fax numbers for Technology Center 2800 are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.


If applicant wishes to send a fax containing a Proposed Amendment for discussion during either a personal interview or a telephone interview then the fax should:

- 1) Contain either the statement "**DRAFT**" or "**PROPOSED AMENDMENT**" on the Fax Cover Sheet; and
- 2) Should be unsigned by the attorney or agent.

This will ensure that the amendment will not be entered into the application and will be forwarded to the examiner as quickly as possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (703) 308-4805. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font, can be reached on (703) 308-4881. The TC Receptionist's telephone number is (703) 308-0956.

Any other inquiry of a technical nature, and all inquiries of a general nature including those relating to the status of an application should be directed to TC 2800 Customer Service Office whose telephone number is (703) 306-3329.


F. L. EVANS
PRIMARY EXAMINER
ART UNIT 2877

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August 1, 2003